

IN THE CLAIMS:

1. (Original) A method for configuring customer premises equipment, comprising the steps of:
 - selecting a set of configuration values;
 - transmitting a discover packet including the set of configuration values to a network access device;
 - if a response packet is not received from the network access device during a predetermined time period, selecting another set of configuration values and transmitting another discover packet including the other set of configuration values; and
 - if a response packet is received from the network access device during the predetermined time period, storing configuration information from the response packet into memory.
2. (Original) The method of claim 1, wherein the set of configuration values is stored in a configuration table.
3. (Original) The method of claim 2, wherein the configuration table includes a plurality of sets of configuration values.
4. (Original) The method of claim 3, wherein the plurality of sets of configuration values includes configuration values commonly used by broadband network equipment.

5. (Original) The method of claim 2, wherein the configuration table includes twenty sets of commonly used configuration values.
6. (Original) The method of claim 1, wherein the configuration values include a Virtual Path Identifier value and a Virtual Channel Identifier value.
7. (Original) The method of claim 1, wherein the configuration values include an Asynchronous Transfer Mode encapsulation value.
8. (Original) The method of claim 1, further comprising the step of reporting that network access is not available if no response packet is received for any set of configuration values.
9. (Original) The method of claim 1, wherein the configuration information from the response packet includes a Virtual Path Identifier value, a Virtual Channel Identifier value, and an ATM encapsulation type value.
10. (Original) The method of claim 1, wherein the network access device is a broadband access concentrator.
11. (Currently Amended) Customer premises equipment, comprising:
a modem chipset configured to send and receive packets;

an asynchronous transfer mode segmentation and reassembly module coupled to the modem chipset;

a memory coupled to the asynchronous transfer mode segmentation and reassembly module, the memory configured to store a plurality of sets of configuration values for the customer premises equipment; and

a processor, coupled to the memory, capable of executing program instructions, the memory including a search module configured to determine which of the plurality of sets of configuration values, if any, is a correct set of configuration values for establishing communications between the customer premises equipment and a network access device, wherein the search module itself selects the correct set of configuration values.

12. (Original) The customer premises equipment of claim 11, wherein the configuration values include Virtual Path Identifier values and Virtual Channel Identifier values.

13. (Original) The customer premises equipment of claim 11, wherein the configuration values include ATM encapsulation types.

14. (Original) The customer premises equipment of claim 11, wherein the plurality of sets of configuration values is a subset of all possible configuration values.

15. (Original) The customer premises equipment of claim 11, wherein the plurality of sets of configuration values includes configuration values commonly used to establish communications with broadband network access devices.
16. (Original) The customer premises equipment of claim 11, wherein the customer premises equipment is a broadband modem.
17. (Original) The customer premises equipment of claim 16, wherein the broadband modem is a Digital Subscriber Line (DSL) modem.
18. (Original) The customer premises equipment of claim 11, wherein the plurality of sets of configuration values is stored into the memory at the time of manufacture of the customer premises equipment.
19. (Original) The customer premises equipment of claim 11, wherein the search module is configured to select one of the plurality of sets of configuration values and create a discover packet that the modem chipset transmits to a network access device.
20. (Original) The customer premises equipment of claim 11, wherein the search module is configured to create a discover packet for each of the plurality of sets of configuration values, and the modem chipset is configured to transmit each of the discover packets to the network access device.

21. (Previously Presented) A system for customer premises equipment auto-configuration, comprising:

means for selecting a set of configuration values;

means for transmitting a discover packet including the set of configuration values to a network access device;

means for selecting another set of configuration values and transmitting another discover packet including the other set of configuration values if a response packet is not received from the network access device during a predetermined time period; and

means for storing configuration information from the response packet into memory if a response packet is received from the network access device during the predetermined time period.